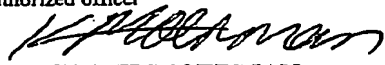


## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001480

|   |   |  |
|---|---|--|
| A. CLASSIFICATION OF SUBJECT MATTER   |   |  |
| Int. Cl. <sup>7</sup> : C07K 2/00; A61K 38/19, 38/20, C07K 7/06, 14/715, 14/71; A61P 35/00, 43/00   |   |  |
| According to International Patent Classification (IPC) or to both national classification and IPC   |   |  |
| B. FIELDS SEARCHED  |   |  |
| Minimum documentation searched (classification system followed by classification symbols)   |   |  |
| See electronic databases  |   |  |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched   |   |  |
| Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  |   |  |
| STN: Medline, CA, WPIDS, Biosis (GM-CSF, IL-3, IL-5, motif, beta, tyrosine, asparagine, tyr577, y577f)  |   |  |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT  |   |  |
| Category*   | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No.  |
| X   | DATABASE NCBI (protein) Accession Number: AAA18171, 16 May 1994<br>GM-CSF receptor beta chain.<br>Sequence data   | 1-13   |
| X   | Bone H. and Welham M. J. "Shc associates with the IL-3 receptor $\beta$ subunit, SHIP and Gab2 following IL-3 stimulation: Contribution of Shc PTB and SH2 domains", Cellular Signalling, 2000, volume 12, pages 183-194<br>Section 3.6, 3.7, page 192 paragraph 1  | 1-60   |
| A   | Stomski F. C. et al., "Identification of a 14-3-3 binding sequence in the common $\beta$ chain of the granulocyte-macrophage colony-stimulating factor (GM-CSF), interleukin-3 (IL-3) and IL-5 receptors that is serine phosphorylated by GM-CSF", Blood, 1999, volume 94 (number 6), pages 1933-1942.<br>Page 1939: discussion paragraph 1 | 1-60   |
| <input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input type="checkbox"/> See patent family annex  |   |  |
| <p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"I" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&amp;" document member of the same patent family</p> |   |  |
| Date of the actual completion of the international search<br>15 December 2004   |   | Date of mailing of the international search report<br>27 JAN 2005  |
| Name and mailing address of the ISA/AU<br>AUSTRALIAN PATENT OFFICE<br>PO BOX 200, WODEN ACT 2606, AUSTRALIA<br>E-mail address: pct@ipaustalia.gov.au<br>Facsimile No. (02) 6285 3929  |   | Authorized officer<br><br>KATHERINE MOERMAN<br>Telephone No : (02) 6283 2714 |

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001480

| C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT |   |                       |
|---|---|-----------------------|
| Category*   | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
| A   | Guthridge M. A. et al., "Mechanism of activation of the GM-CSF, IL-3 and IL-5 family of receptors", Stem Cells, 1998, volume 16 pages 301-313<br>Page 307-308 section titled 'Survival' and Figure 3  | 1-60                  |
| A   | Itoh T. et al., "Granulocyte-macrophage colony-stimulating factor provokes RAS activation and transcription of <i>c-fos</i> through different modes of signalling" The Journal of Biological Chemistry, 1996, volume 271 (number 13), pages 7587-7592<br>Results and discussion | 1-60                  |

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001480

**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☒ Claims Nos.: 1-6  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  
The search has been limited substantially to the examples.
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

**Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.